ABSTRACT

Methods for the computational analysis of polyketides and the computer-assisted design of PKS genes are facilitated by representing the structure of a polyketide and/or a PKS gene that encodes the PKS that produces the polyketide by alphanumeric symbols that facilitates computer assisted analysis. A database of polyketides and corresponding PKS genes that can be rapidly searched and information extracted for a variety of applications, including the design and specification of PKS genes via the recombining of modules or portions of modules or sets of modules from already known and available PKS genes.